

**pennsylvania**

DEPARTMENT OF ENVIRONMENTAL PROTECTION



# Nockamixon HSCA Site Update

November 2, 2023

Josh Shapiro, Governor

Jessica Shirley, Interim Acting Secretary

# History

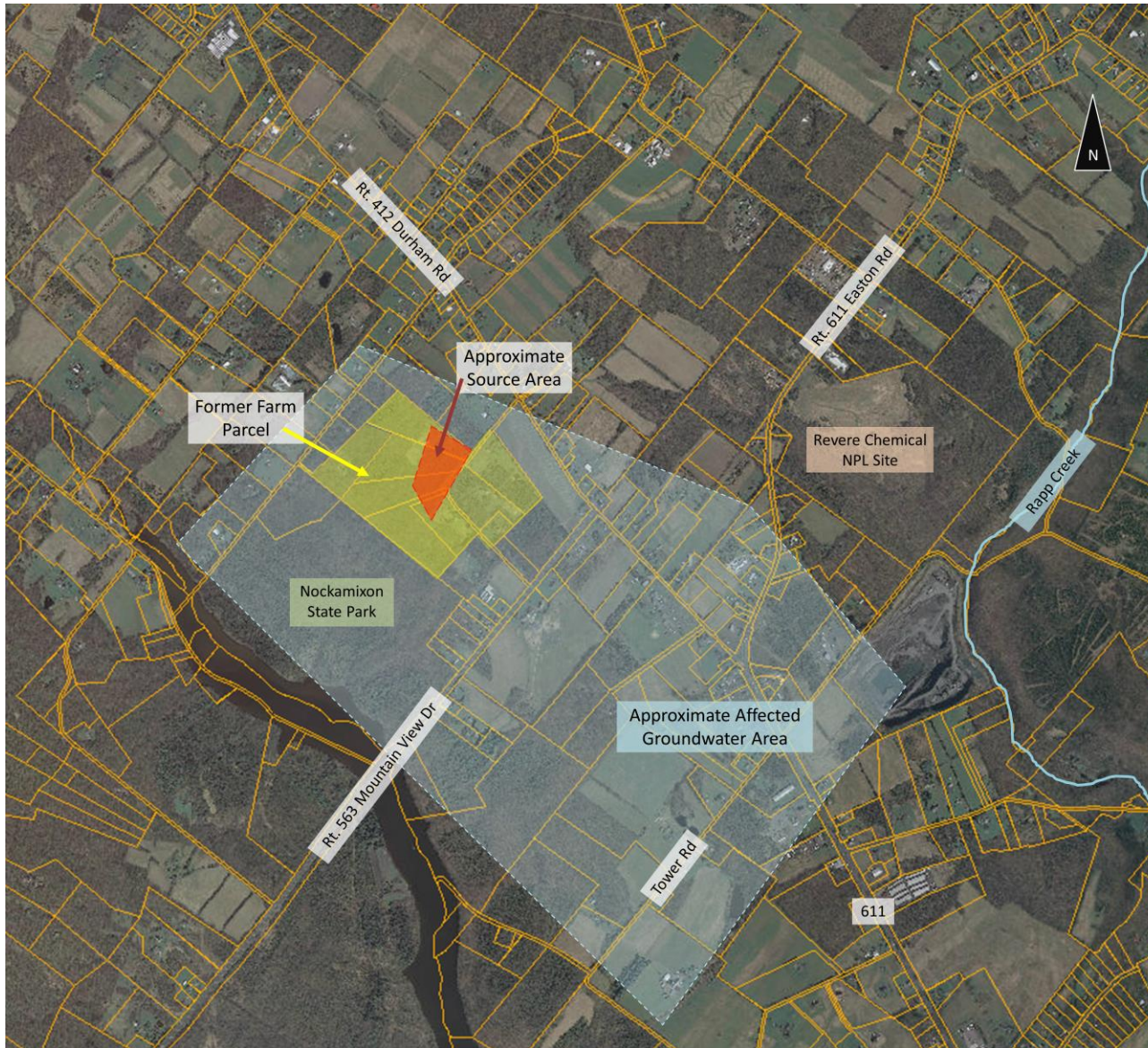
- 2009: Bucks County Health Department notified DEP of Trichloroethene (TCE) contamination in wells serving a local restaurant and several homes.
- 2010 – 2018: DEP sampled approximately 100 private residences and small businesses in the area.
- DEP has identified a former 70-acre farm as the source area, which was reportedly used to dispose industrial waste in the 1960s – 1970s. The former owner is deceased, and the property has been subdivided into 9 parcels.

# Site Area



## Nockamixon HSCA Site

*All areas are approximate representations only.*



# Impacts - CVOCs

## Human Health and Environmental Impacts & Completed Response Actions

- Chlorinated Volatile Organic Compounds (CVOCs) detected in soil, groundwater, and surface water.
  - 2010 – 2014: DEP installed carbon filtration systems on 28 residential wells with TCE detections exceeding 5 µg/L MCL.
  - 2015 – 2018: DEP performed additional residential sampling to address potential data gaps. Carbon filtration systems installed on an additional 14 residential wells.
  - Total 42 residential wells. Institutional controls placed on deeds to ensure drinking water passes through filter before consumption.
    - Residents responsible for maintaining their filters
    - Environmental Covenants or Administrative Orders are available to view on the PA Activity and Use Limitations Registry: <http://www.depgis.state.pa.us/pa-aul/>

# Impacts - CVOCs



## Nockamixon HSCA Site

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### Legend

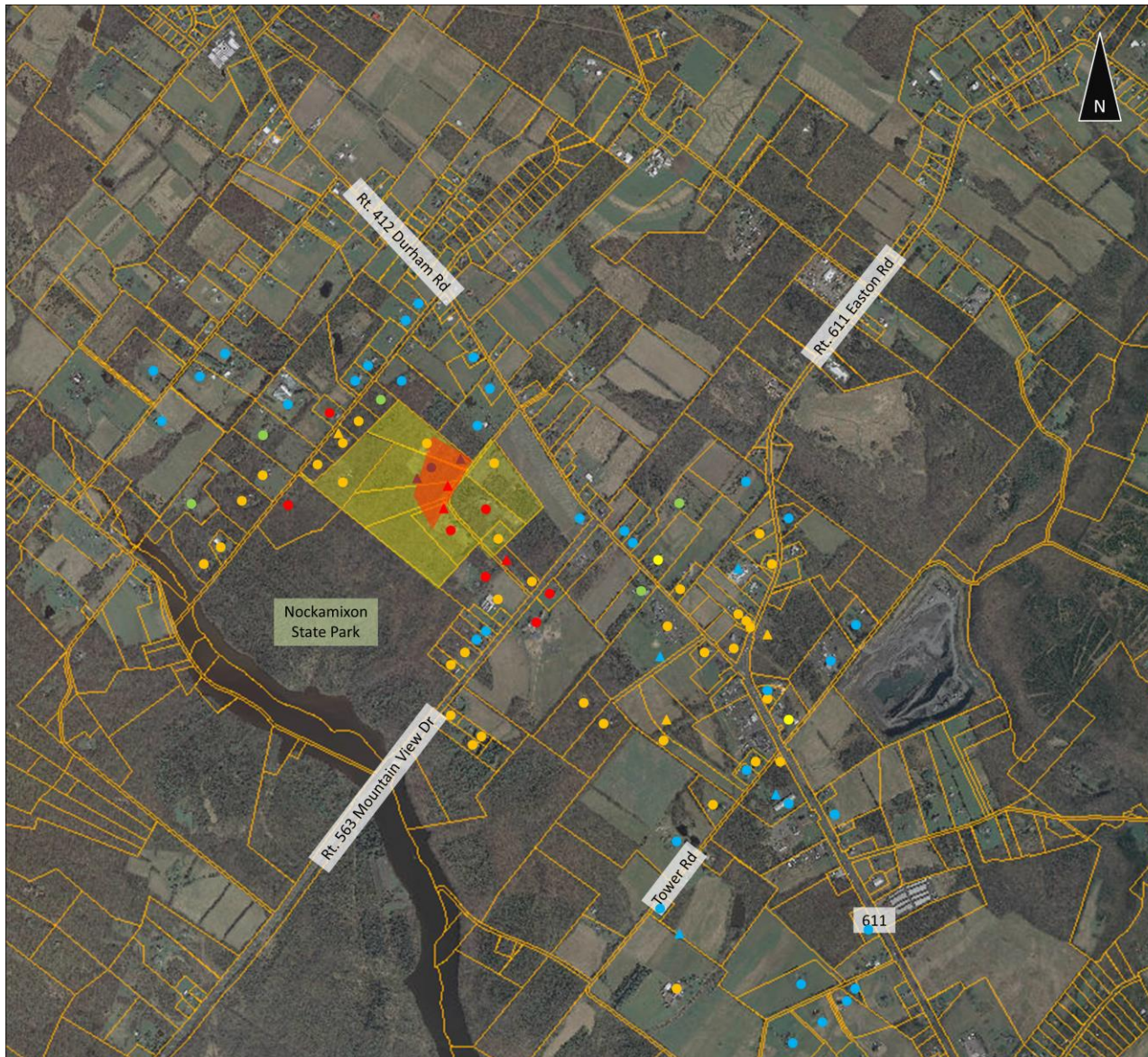
▲ Monitoring Well

● Private Well

#### Maximum TCE Concentration

■	Non-Detect
■	< 2 ug/L
■	2 – 5 ug/L
■	5 – 100 ug/L
■	100 - 1000 ug/L
■	> 1000 ug/L

Updated September 2023



# Impacts – Vapor Intrusion

## Human Health and Environmental Impacts & Completed Response Actions

- 2016 – 2018: Two homes with unacceptable indoor air risks due to TCE vapor intrusion (VI) were identified near the source area.



- DEP installed sub slab VI mitigation systems
- Environmental Covenants placed on deeds to ensure VI mitigation systems remain in use.
  - Available to view on the PA Activity and Use Limitations Registry:  
<http://www.depgis.state.pa.us/pa-aul/>

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# Impacts – 1,4-Dioxane

## Human Health and Environmental Impacts & Continued Monitoring

- 1,4-Dioxane detected in soil, groundwater, and surface water.
  - 2019 - Present: Found 3 residential wells near the source area with 1,4-Dioxane detections exceeding 6.4  $\mu\text{g}/\text{L}$  MSC.



- DEP initiated a study of an upgraded carbon media in the homes' existing treatment systems to address 1,4-Dioxane, the study is ongoing.
  - Quarterly monitoring

*All areas are approximate representations only.*

# Current Status

- DEP continues to monitor Site groundwater annually.



- TCE in source area soil remains above residential standards.
- 2021 – Present: DEP performed additional source area investigation to evaluate remediation alternatives.

*All areas are approximate representations only.*



# Next Steps

- Prepare a **Remedial Alternative Analysis Report**
  - To determine best options/actions to address soil in source area
- Action will likely require a “Remedial Response”, which involves:
  - Site evaluated and given a Hazard Ranking System Score
  - Site listed on the Pennsylvania Priorities List (or referred to EPA for NPL listing)
    - Public Comment period required for PAPL listing
  - Following listing, issue an “Analysis of Alternatives”
    - Public Comment period
  - Review any comments, select method for remediation, perform the remediation
- Groundwater monitoring will continue during this effort



Bureau of Environmental Cleanup & Brownfields

## Contact Information

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# Resources

- Environmental Covenants or Administrative Orders are available to view on the PA Activity and Use Limitations Registry:  
<http://www.depgis.state.pa.us/pa-aul/>
- Administrative Records for Completed Response Actions are available for review at the Nockamixon Township and DEP Norristown Offices - [Southeast Regional Office \(pa.gov\)](http://www.pa.gov)